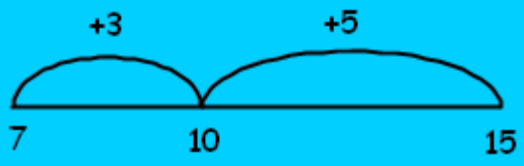
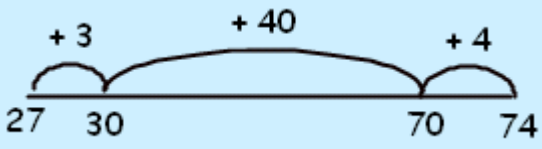
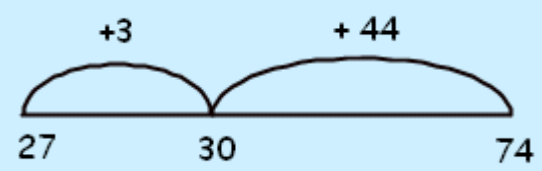
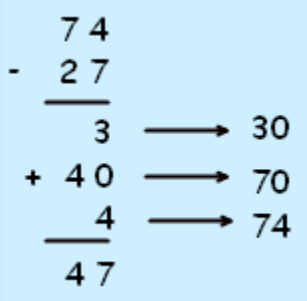
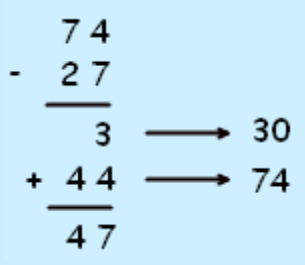
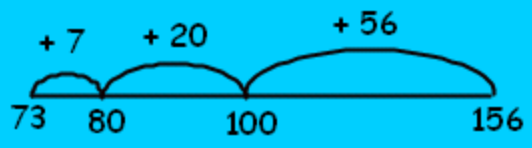
Albury Primary School
Calculation Policy
Subtraction

At the beginning of the year consolidate methods from previous year group.

Year Group	Method
R	See mental calculation guidance.
1	Using an empty number line to solve 2 digit subtract 1 digit numbers. Reinforcing subtracting means finding the difference and can be done by counting up. e.g. 15 – 7  3 + 5 = 8
2	Consolidate year 1 e.g. 74 – 27  40 + 3 + 4 = 47  3 + 44 = 47 Demonstrating column method using counting up where appropriate.  

3 digit numbers subtract 2 digit numbers.

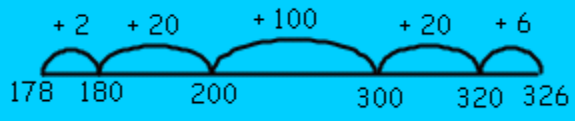
e.g. 156 – 73



$$
\begin{array}{rl}
 & 156 \\
- & 73 \\
\hline
 & 7 \longrightarrow 80 \\
+ & 20 \longrightarrow 100 \\
 & 56 \longrightarrow 156 \\
\hline
 & 13 \\
+ & 70 \\
\hline
 & 83
\end{array}
$$

e.g. 326 – 178

3



$$
\begin{array}{rl}
 & 326 \\
- & 178 \\
\hline
 & 2 \longrightarrow 180 \\
+ & 20 \longrightarrow 200 \\
 & 100 \longrightarrow 300 \\
 & 20 \longrightarrow 320 \\
 & 6 \longrightarrow 326 \\
\hline
 & 148 \\
\hline
\end{array}
$$

Consolidate year 3 methods.
e.g. 74 – 37

$$\begin{array}{rrrrrr} 700 & + & 40 & + & 8 & \\ & & 30 & + & 7 & \\ \hline 700 & + & 10 & + & 1 & = 711 \end{array}$$

Move onto 3 digit numbers subtract 3 digit numbers with no borrowing.
e.g. 767 – 341

$$\begin{array}{r} 700 + 60 + 7 \\ - \; 300 + 40 + 1 \\ \hline 400 + 20 + 6 = 426 \end{array}$$

(Use this to demonstrate, remember most children will be able to calculate this mentally and should be allowed to do so).

Introduce borrowing.
e.g. 761 – 347

4

$$\begin{array}{r} 700 + 60 + 1 \\ - \; 300 + 40 + 7 \\ \hline 700 + 50 + 11 \\ - \; 300 + 40 + 7 \\ \hline 400 + 10 + 4 = 414 \end{array}$$

This method can also be used for 2 borrows, however demonstrate to children that counting up is more efficient. (Or demonstrate on a blank number line).
e.g. 641 – 368

$$\begin{array}{r} 600 + 40 + 1 \\ - \; 300 + 60 + 8 \\ \hline 600 + 30 + 11 \\ - \; 300 + 60 + 8 \\ \hline 500 + 130 + 11 \\ - \; 300 + 60 + 8 \\ \hline 200 + 70 + 3 = 273 \end{array}$$

$$\begin{array}{r} 641 \\ - \; 368 \\ \hline 2 \longrightarrow 370 \\ 30 \longrightarrow 400 \\ 200 \longrightarrow 600 \\ 41 \longrightarrow 641 \\ \hline 273 \end{array}$$

5	Working with 3 digit subtract 3 digit numbers, including decimals up to 2 decimal places. Working towards compact method. e.g. 563 – 271 500 + 60 + 3 - 200 + 70 + 1 400 + 160 + 3 - 200 + 70 + 1 200 + 90 + 2 = 292 4 16 5 ~~6~~ 3 - 2 7 1 2 9 2 Partitioning method can be used where there are 2 borrows however the counting up method is more efficient. (See below) e.g. 563 – 278 400 150 13 ~~500~~ + ~~60~~ + ~~3~~ - 200 + 70 + 8 200 + 80 + 5 = 285 15 4 ~~5~~ 13 ~~5 6 3~~ - 2 7 8 2 8 5 5 6 3 - 2 7 8 2 2 → 300 + 2 0 0 → 500 6 3 → 563 2 8 5
6	Consolidating methods taught previously. Reinforcing with children that the method used depends on the calculation. e.g. 503 – 278 4 9 13 ~~5~~ ~~0~~ ~~3~~ - 2 7 8 2 2 5 + 22 + 203 278 300 503 203 + 22 = 225

- The counting up method can be used with decimals when up to no more than 3 columns are needed.